

CLAIMS

1. A stretched laminate film with oxygen-gas barrier properties, which is a laminate including a layer (a) formed from a composition of a polycarboxylate-based polymer (A) and a plasticizer (B), a layer (c) containing a multivalent metal compound (C) and a layer (b) formed from a thermoplastic resin, wherein the laminate comprises at least one layer forming unit where the layer (a) and the layer (c) are adjacent to each other, and wherein at least the layer (a) and the layer (b) are stretched with a surface stretch ratio of 1.1 to 100, respectively.

2. The stretched laminate film according to claim 1, wherein a compositional mass ratio of the polycarboxylate-based polymer (A) to the plasticizer (B) is 99.9/0.1 to 70/30.

3. The stretched laminate film according to any one of claims 1 and 2, wherein the plasticizer (B) is polyalcohol.

4. A method of producing a stretched laminate film with oxygen-gas barrier properties, which includes a layer (a) formed from a composition of a polycarboxylate-based polymer (A) and a plasticizer (B), a layer (c) containing a multivalent metal compound (C) and a layer (b) formed from a thermoplastic resin, and which includes at least one layer forming unit where the layer (a) and the layer (c) are adjacent to each other, the method comprising the steps of:

superposing at least one of the layer (a) and the layer (c) on at least one surface of the layer (b); and

stretching a laminate film including the layer (a) and the layer (b).

5. The method of producing a stretched laminate film

according to claim 4, wherein the superposition is performed by means of a coating process.

6. The method of producing a stretched laminate film according to any one of claims 4 and 5, wherein a surface stretch ratio is 1.1 to 100 in the stretching step.

7. The method of producing a stretched laminate film according to any one of claims 4 to 6, wherein a compositional mass ratio of the polycarboxylate-based polymer (A) to the plasticizer (B) is 99.9/0.1 to 70/30.

8. The method of producing a stretched laminate film according to any one of claims 4 to 7, wherein the plasticizer (B) is polyalcohol.

9. The method of producing a stretched laminate film according to any one of claims 4 to 8, wherein the laminate film is stretched after applying the layer (c) to a surface obtained by applying the layer (a) to the layer (b), or after applying the layer (a) to a surface obtained by applying the layer (c) to the layer (b).

10. The method of producing a stretched laminate film according to any one of claims 4 to 8,

wherein at least one of the layer (a) and the layer (c) is applied to at least one surface of the layer (b) formed from an unstretched thermoplastic resin which has been melted and extruded, and the laminate film obtained by the application is stretched in one direction, and

wherein, in a case where the layer (a) is applied thereto, the layer (c) which is adjacent to the layer (a), and which, along with the layer (a), constitutes the layer forming unit,

is subsequently applied to the applied layer (a), and then is stretched in a direction perpendicular to the direction in which the layer (a) has been stretched, or

wherein, in a case where the layer (c) is applied thereto, the layer (a) which is adjacent to the layer (c), and which, along with the layer (c), constitutes the layer forming unit, is subsequently applied to the applied layer (c), and then is stretched in a direction perpendicular to the aforementioned direction in which the layer (c) has been stretched.

11. The method of producing a stretched laminate film according to any one of claims 4 to 8,

wherein at least one of the layer (a) and the layer (c) is applied to at least one surface of the layer (b) formed from a thermoplastic resin which has been stretched in only one direction after being melted and extruded, and the laminate film obtained by the application is stretched in a direction perpendicular to the direction in which the thermoplastic resin has been stretched, and

wherein, in a case where the layer (a) is applied thereto, the layer (c) which is adjacent to the layer (a), and which, along with the layer (a), constitutes the layer forming unit, is subsequently applied to the applied layer (a), or

wherein, in a case where the layer (c) is applied thereto, the layer (a) which is adjacent to the layer (c), and which, along with the layer (c), constitutes the layer forming unit, is subsequently applied to the applied layer (c).

12. The method of producing a stretched laminate film according to any one of claims 4 to 8,

wherein the layer (a) and the layer (c) are applied to at least one surface of the layer (b) formed from an unstretched thermoplastic resin which has been melted and extruded, and thereafter the laminate film obtained by the application is stretched in a direction in which the film runs and in a direction perpendicular to the direction in which the film runs at the same time.

13. The method of producing a stretched laminate film according to any one of claims 4 to 8,

wherein the layer (a) is applied to at least one surface of the layer (b) formed from an unstretched thermoplastic resin which has been melted and extruded, and thereafter the laminate film obtained by the application is stretched in a direction in which the film runs and in a direction perpendicular to the direction in which the film runs at the same time, and

wherein subsequently the layer (c) is applied to the surface of the layer (a) thus applied.

14. The method of producing a stretched laminate film according to any one of claims 4 to 13, wherein the application to the layer (b), which has been melted and extruded, and the stretch of the laminate film obtained by the application are performed in an integrated manner.